

St. Joe River Sub-basin Temperature TMDL

Agricultural Addendum Plan (DRAFT)

HUC 17010304



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In Cooperation with Benewah Soil and Water Conservation District

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(Cover photo provided by Keith Swallows: winter and wildlife on the St. Joe River)

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St. Joe River Sub-basin Temperature TMDL Agricultural Addendum Plan

Introduction

After review of the 2011 EPA approved St. Joe River Sub-basin Temperature TMDL Addendum, this researcher could not find actual temperature load allocations or reductions for agriculture, or any of the Designated Management Agencies (DMAs). Some guidance to DMA's was found under the heading Implementation Strategies/ Approach. DEQ stated that "TMDLs will be implemented through the continuation of ongoing pollution control activities in the watershed. The designated Watershed Advisory Group (WAG), DMAs, local organizations, and other appropriate public process participants are expected to do the following:

- Develop BMP's to achieve load allocations.
- Give reasonable assurance that management actions will meet load allocations through both quantitative and qualitative analysis of management measures.
- Adhere to measurable milestones for progress.
- Develop a timeline for implementation, including cost and funding.
- Develop a monitoring plan to determine if BMP's are being implemented, if individual BMP's are effective, and if load allocations are being met."

The addendum's guidance continues with "The responsible DMA will recommend specific control actions then submit the implementation plan to DEQ. DEQ will act as a repository for the implementation plan and conduct 5-year reviews of progress toward TMDL goals". Under the heading Responsible Parties, the Idaho Soil and Water Conservation Commission is listed as the DMA for grazing and agricultural activities (IDEQ 2011).

The mission of the Idaho Soil and Water Conservation Commission (ISWCC) is to facilitate coordinated non-regulatory, voluntary, and locally-led conservation by federal, state, and local government including Idaho's conservation districts and other partners to conserve, sustain, improve, and enhance soil, water, air, plant and animal resources (ISWCC, 2013). The ISWCC works with the Benewah Soil and Water Conservation District (BSWCD), the Idaho Association of Soil Conservation Districts (IASCD), and the Natural Resources Conservation Service (NRCS) in a conservation partnership to reach common goals and successfully deliver conservation programs in Benewah and part of Shoshone Counties. The BSWCD's 5-year plan identifies water quality as one of their top priorities.

The purpose of this agricultural plan is to document observed agricultural uses and make recommendations that would improve the physical, chemical, and biological functions of waterbodies within the St. Joe River Sub-basin. This plan evaluated potential temperature concerns from agricultural land use adjacent to the following streams listed in category 5 of the

2008 Integrated Report: St. Joe River, Marble Creek, California Creek, Medicine Creek, Yankee Bar Creek, Slate Creek, Big Creek, East Fork Big Creek (St. Joe River Watershed); and Merry Creek, Olson Creek, Gold Center Creek, Tyson Creek, Carpenter Creek, Thorn Creek, John Creek (St. Maries River Watershed). Active agricultural use was only observed along the St. Joe River, Big Creek, Olson Creek, Tyson Creek, and Carpenter Creek (IDEQ, 2011).

Background for St. Joe River Sub-basin

The following is an attempt to summarize all TMDL documents for the St. Joe River Sub-basin since 2003.

- **St. Joe River Sub-basin Assessment and TMDL (July 2003)**

Water Bodies and Pollutants for Which TMDLs Were Developed: Beaver, Blackjack, Bluff, Fly, Gold, Harvey, Heller, Loop, Mosquito, Simmons, and Tank Creeks- Temperature; Bear, Little Bear, and Fishhook Creeks- Sediment and Temperature; Mica Creek- Sediment.

EPA approved this document in August 2003.

Agricultural Assessment of the TMDL Tributaries of the St. Joe River Sub-basin was completed in May 2004. No agricultural use was observed within these St. Joe River TMDL tributaries and thus no plan developed.

- **St. Maries River Sub-basin Assessment and TMDL (July 2003)**

Water Bodies and Pollutants for Which TMDLs Were Developed: Gold Center, Flewsie, Gramp Creeks- Temperature; St. Maries River, West Fork of the St. Maries River, Middle Fork of the St. Maries River, Santa, and Emerald Creeks- Sediment and Temperature; Carpenter, Alder, Tyson, Thorn, Renfro, Crystal, Charlie and John Creeks- Sediment.

EPA approved this document in August 2003.

St. Maries River and Tributaries Agricultural TMDL Implementation Plan was completed in November 2003. This agricultural plan addressed all the above waterbodies and pollutants for which TMDLs were developed.

- **St. Joe River Sub-basin Temperature Total Maximum Daily Loads: Addendum to the St. Joe River Sub-basin Assessment and Total Maximum Daily Loads and St. Maries River Sub-basin Assessment and Total Maximum Daily Loads (September 2011)**

This Addendum assessed 15 additional streams and determined that they were exceeding Idaho water quality temperature standards. These newly assessed waterbodies included: St. Joe River, Marble, California, Medicine, Yankee Bar, Slate, East Fork Big, Big Creeks (St. Joe River Sub-basin); and Merry, Olson, Gold Center, Tyson, Carpenter, Thorn, John Creeks (St. Maries River Sub-basin). Temperature TMDLs were developed for Big, East Fork of Big, Heller, Sherlock, John, Tyson, Carpenter, Merry, and Thorn Creeks.

EPA approved this document in December 2011.

No agricultural use exists in Marble, California, Medicine, Yankee Bar, Slate, East Fork of Big, Heller, Sherlock, Gold Center, Merry, and John Creeks. The original St. Maries River and Tributaries Agricultural TMDL Implementation Plan that was completed in November 2003, addressed Tyson, Carpenter, and Thorn Creeks for sediment and temperature. Thus, this St. Joe River Sub-basin Temperature TMDL Agricultural Addendum Plan addresses the St. Joe River, Big Creek, and Olson Creek for temperature.

- **St. Joe and St. Maries River Sub-basin Assessment and Total Maximum Daily Load: Five-Year Review (September 2011)**

Accomplishments

The conservation partnership has been active in soil and water conservation activities and public education efforts in Benewah and part of Shoshone Counties since the formation of the Benewah Soil and Water Conservation District in 1946. The partnership has developed individual conservation plans for local agricultural producers and has pursued funding sources to assist in implementing BMPs. The partnership has restored riparian areas, stabilized stream banks, improved forest health and water quality, and improved livestock management. The partnership also coordinates with other agencies and individuals in educational activities for youth, and makes educational materials available to the public.

Funding sources utilized by the conservation partnership in Benewah and part of Shoshone Counties have included programs such as Environmental Quality Incentives Program (EQIP); Wildlife Habitat Incentive Program (WHIP); Conservation Reserve Program (CRP); Conservation Technical Assistance (CTA); Clean Water Act Section 319 Program; and Coeur d’Alene Lake Management Plan. Table 1 summarizes accomplishments by NRCS within the St. Joe River Sub-basin occurring in the last 6 years (2010 – 2015) (Swallows, K. 2016):

Table 1. Completed BMPs in the St. Joe River Sub-basin

BMP	Amount	Units	Project/Program	Watershed
Access Control	0.5	Acres	EQIP (2010)	St. Joe River
Heavy Use Protection	4	Each	EQIP (2010)	St. Joe River
Riparian Exclusion Fence	5,292	Feet	EQIP (2010)	St. Joe River
Streambank Protection (Rock and Vegetation)	8,620	Feet	EQIP (2010)	St. Joe River
Forest Stand Improvement	500	Acres	CTA (2010)	St. Joe River

Table 1. Continued

BMP	Amount	Units	Project/Program	Watershed
Streambank Protection (Rock and Vegetation)	6,120	Feet	EQIP (2010)	St. Maries River
Access Control	2.6	Aces	EQIP (2011)	St. Joe River
Heavy Use Protection	3	Each	EQIP (2011)	St. Joe River
Riparian Exclusion Fence	3.400	Feet	EQIP (2011)	St. Joe River
Riparian Forest Buffer	3	Acres	EQIP (2011)	St. Joe River
Streambank Protection (Rock and Vegetation)	4,250	Feet	EQIP (2011)	St. Joe River
Streambank Protection (Rock and Vegetation)	3,344	Feet	WHIP (2011)	St. Joe River
Forest Stand Improvement	23	Acres	EQIP (2011)	St. Joe River
Tree/Shrub Establishment	7.5	Acres	EQIP (2011)	St. Joe River
Tree/Shrub Pruning	29	Acres	EQIP (2011)	St. Joe River
Access Control	2	Acres	EQIP (2011)	St. Maries River
Riparian Exclusion Fence	2,200	Feet	EQIP (2011)	St. Maries River
Riparian Forest Buffer	2.7	Acres	EQIP (2011)	St. Maries River
Streambank Protection (Rock and Vegetation)	1,340	Feet	EQIP (2011)	St. Maries River
Forest Stand Improvement	3	Acres	EQIP (2011)	St. Maries River
Heavy Use Protection	3	Each	EQIP (2012)	St. Joe River
Riparian Forest Buffer	3.6	Acres	EQIP (2012)	St. Joe River
Riparian Forest Buffer	1.5	Acres	WHIP (2012)	St. Joe River
Streambank Protection (Rock and Vegetation)	4,245	Acres	EQIP (2012)	St. Joe River
Streambank Protection (Rock and Vegetation)	280	Feet	WHIP (2012)	St. Joe River

Table 1. Continued

BMP	Amount	Units	Project/Program	Watershed
Riparian Forest Buffer	0.9	Acres	EQIP (2012)	St. Maries River
Streambank Protection (Rock and Vegetation)	460	Feet	EQIP (2012)	St. Maries River
Forest Stand Improvement	582	Acres	EQIP (2012)	St. Maries River
Tree/Shrub Pruning	582	Acres	EQIP (2012)	St. Maries River
Access Control	4.2	Acres	EQIP (2013)	St. Joe River
Fish and Wildlife Structures	19	Each	EQIP (2013)	St. Joe River
Heavy Use Protection	3	Each	EQIP (2013)	St. Joe River
Riparian Exclusion Fence	4,093	Feet	EQIP (2013)	St. Joe River
Riparian Forest Buffer	4.8	Acres	EQIP (2013)	St. Joe River
Riparian Forest Buffer	0.3	Acres	WHIP (2013)	St. Joe River
Streambank Protection (Rock and Vegetation)	10,122	Feet	EQIP (2013)	St. Joe River
Streambank Protection (Rock and Vegetation)	1,465	Feet	WHIP (2013)	St. Joe River
Tree/Shrub Establishment	0.5	Acres	EQIP (2013)	St. Joe River
Access Control	2.7	Acres	EQIP (2013)	St. Maries River
Fish and Wildlife Structures	20	Each	EQIP (2013)	St. Maries River
Riparian Exclusion Fence	1,850	Feet	EQIP (2013)	St. Maries River
Riparian Forest Buffer	2.7	Acres	EQIP (2013)	St. Maries River
Streambank Protection (Rock and Vegetation)	2,860	Feet	EQIP (2013)	St. Maries River

Table 1. Continued

BMP	Amount	Units	Project/Program	Watershed
Forest Stand Improvement	10	Acres	EQIP (2013)	St. Maries River
Tree/Shrub Establishment	4	Acres	EQIP (2013)	St. Maries River
Access Control	5	Acres	EQIP (2014)	St. Joe River
Fish and Wildlife Structures	5	Each	EQIP (2014)	St. Joe River
Heavy Use Protection	4	Each	EQIP (2014)	St. Joe River
Riparian Exclusion Fence	11,683	Feet	EQIP (2014)	St. Joe River
Riparian Forest Buffer	5	Acres	EQIP (2014)	St. Joe River
Streambank Protection (Rock and Vegetation)	4,189	Feet	EQIP (2014)	St. Joe River
Streambank Protection (Rock and Vegetation)	400	Feet	WHIP (2014)	St. Joe River
Fish and Wildlife Structures	6	Each	EQIP (2014)	St. Maries River
Heavy Use Protection	1	Each	EQIP (2014)	St. Maries River
Streambank Protection (Rock and Vegetation)	2,510	Feet	EQIP (2014)	St. Maries River
Forest Stand Improvement	10	Acres	EQIP (2014)	St. Maries River
Access Control	3	Acres	EQIP (2015)	St. Joe River
Fish and Wildlife Structures	24	Each	EQIP (2015)	St. Joe River
Heavy Use Protection	2	Each	EQIP (2015)	St. Joe River
Riparian Exclusion Fence	2,301	Feet	EQIP (2015)	St. Joe River
Streambank Protection (Rock and Vegetation)	7,018	Feet	EQIP (2015)	St. Joe River

Table 1. Continued

BMP	Amount	Units	Project/Program	Watershed
Upland Wildlife Habitat Management	1	Acres	EQIP (2015)	St. Joe River
Access Control	4.5	Acres	EQIP (2015)	St. Maries River
Heavy Use Protection	2	Each	EQIP (2015)	St. Maries River
Riparian Exclusion Fence	3,580	Feet	EQIP (2015)	St. Maries River
Riparian Forest Buffer	3	Acres	EQIP (2015)	St. Maries River
Streambank Protection (Rock and Vegetation)	2,180	Feet	EQIP (2015)	St. Maries River
Forest Stand Improvement	5.1	Acres	EQIP (2015)	St. Maries River

The accomplishments highlighted in Table 1, translates into the following benefits to the St. Joe and St. Maries Rivers (NRCS, 2014):

- Reduced sediment and associated nutrient load
- Improved water quality
- Improved fish habitat
- Improved floodplain functionality
- Helping to restore riparian zones

BMP Benefit Analysis

Approximately 13.2 miles of eroding river banks have been protected on the St. Joe and St. Maries Rivers to date. By assuming an average of 1 foot per year lateral recession rate and an average eroding bank height of 7 feet the following soil reduction can be determined. Estimated Soil Loss Reduction= (1 foot/year) X (7 feet) X (69,696 feet) = 487,872 cubic feet/year or 18,069 cubic yards/year. This equates to roughly 1,500 dump truck loads of sediment and associated nutrients. Figure 1 shows typical streambank protection with the use of rock and massive vegetation.

Approximately 10 miles of riparian exclusion fencing has been installed along the St. Joe and St. Maries Rivers. This BMP enables riparian vegetation and tree plantings to become established and also excludes livestock from entering the waterbodies uncontrolled.

Approximately 38 acres of riparian forest buffers have been planted along the St. Joe and St. Maries Rivers. The expected long term benefit of this BMP is to increase shading and wildlife habitat. Figure 2 shows riparian forest buffer and exclusion fencing.

Figure 1: St. Joe River Streambank Protection with Rock and Vegetation



Figure 2: St. Joe River Riparian Forest Buffer and Exclusion Fencing



Agricultural Water Quality Inventory and Evaluation

This watershed assessment discusses the potential for agricultural temperature impacts to the St. Joe River (Marble Creek to St. Maries River), Big Creek (St. Joe River tributary), and Olson Creek (St. Maries River tributary). All other addendum temperature TMDL waterbodies were addressed in the St. Maries River and Tributaries Agricultural TMDL Implementation Plan completed in November 2003.

In order to assess agricultural impacts to surface water on TMDL listed streams, the first step this researcher completes is to inventory private agricultural land use that exists within the above selected waterbodies. For this plan, agricultural land use was inventoried visually in the field, starting in 2014 and updating through the spring of 2016 (Hogen, M. 2016). The main agricultural uses found within the assessment areas are hay land, pasture land, and hayed pasture land.

- **St. Joe River (Marble Creek to the St. Maries River) and Big Creek:**

The agricultural land use inventory conducted for the St. Joe River and Big Creek has been broken out into 5 segments (for ease of mapping and viewing), and illustrated on Figures 3-7. These St. Joe River segments include the St. Maries area, Phillips Draw area, St. Joe City area, Calder area, and Herrick area. Big Creek has been included in the Herrick area agricultural use map.

701 acres of hay lands were observed within the lower St. Joe River from Marble Creek to the St. Maries River. These hay fields are typically in good to excellent condition and lie on relatively flat slopes. In general, highly productive hay fields are fertilized, but at rates typically below recommended due to economic constraints. Proximity of hay lands to the riparian zone of the St. Joe River was documented where possible. In general, about 50% of the adjacent hay lands to the St. Joe River (6 of 12) are fairly well vegetated and buffered from agricultural use. The unbuffered hay fields totaled about 10,830 feet along the St. Joe River. A 25 foot vegetative buffer on these fields adjacent to the river could significantly increase shoreline shading and reduce streambank erosion and its associated nutrients. Hay land was not found adjacent to Big Creek.

1,293 acres of pasture land was inventoried within this designated area. Agricultural land that is first hayed and then late grazed was also inventoried. 306 acres of hayed pasture was documented. Domesticated livestock observed on these pasture/hayed pasture areas included cattle and horses. Approximately 769 head of livestock (656 cows and 113 horses) were observed within the St. Joe River agricultural lands. Part of the agricultural inventory included documenting livestock access to the riparian areas of the St. Joe River and Big Creek. 11 horses were observed within the Big Creek sub-watershed, but were fenced out of the riparian area and thus not significantly impacting the water quality of Big Creek. As discussed in the Accomplishments section, approximately 10 miles of riparian exclusion fencing has been installed along the St. Joe and St. Maries Rivers with assistance from NRCS projects. This agricultural pasture inventory found a need for even more agricultural fencing projects along the St. Joe River. Roughly 6.5 miles of pasture land adjacent to the St. Joe River still allow livestock access to the river. A significant water quality benefit could be achieved by installing riparian exclusion fencing and a vegetative buffer (where needed) on these unprotected agricultural grazing areas along the river. Other St. Joe River tributaries that livestock are allowed to access the riparian areas include Street Creek, Reeds Gulch Creek, Bond Creek, and Bear Creek. Approximately 5.5 miles on these tributaries could be fenced which would ultimately improve shading and reduce streambank erosion.

During the winter of 2015, 19 winter livestock feeding areas were visually inventoried within the agricultural lands of the St. Joe River and its tributaries. These livestock feeding areas included both cattle and horses, and varied from a few head to a larger herd. 14 of the 19 were relatively close to the St. Joe River, and the other five were in tributaries of the St. Joe River (Big Creek, Reeds Gulch Creek, and Bond Creek). 12 of the 19 are well buffered from the St. Joe River by highway grades, levees, or just distance and terrain. In summary, these feeding areas

are not impacting water quality of the St. Joe River. 7 of the winter feeding areas are adjacent to the St. Joe River, Reeds Gulch Creek, and Bond Creek. According to DEQ's 2012 Integrated Report, Reeds Gulch Creek and Bond Creek are fully supportive and do not require TMDL's. Potential water quality impacts from these feeding areas to adjacent waterbodies could be alleviated by moving the livestock to buffered or upland sites.

- **Olson Creek (St. Maries River Tributary):**

The mouth of Olson Creek lies about 3 miles southeast of Fernwood, Idaho. The headwaters originate at an elevation of nearly 4,500 feet and then flows approximately 6.5 miles in length before it enters the St. Maries River just below State Highway 3. A large majority (95%) of Olson Creek flows through state and commercial forest land before flattening out at the bottom. Within this non-forested reach a small amount of private agricultural land exists and was inventoried for agricultural use in the spring of 2016. The agricultural land use inventory conducted for Olson Creek has been illustrated on Figure 8. About 30 acres of pasture land was inventoried within this designated area. Agricultural land that is first hayed and then late grazed was also inventoried. 89 acres of hayed pasture was documented. Domesticated livestock observed on these pasture/hayed pasture areas included cattle and horses. Approximately 19 head of livestock (14 cows and 5 horses) were observed within the Olson Creek agricultural lands. Part of the agricultural inventory included documenting livestock access to the riparian areas of the Olson Creek. Livestock access to Olson Creek was observed on 1200 feet. A significant water quality benefit could be achieved by installing 1200 feet of riparian exclusion fencing along this unprotected reach of Olson Creek.

Figure 3: St. Joe River Agricultural Use (St. Maries Area)

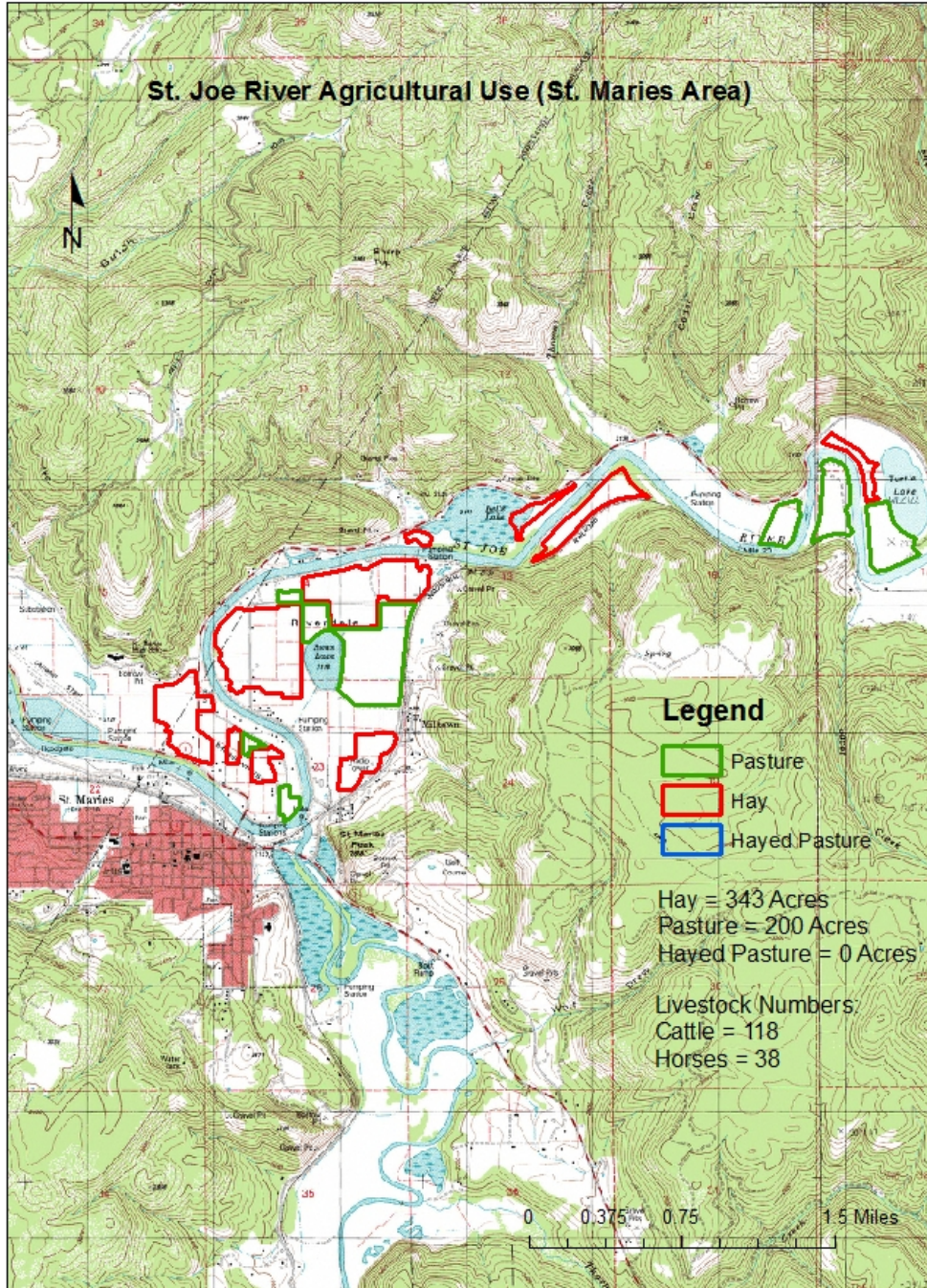


Figure 4: St. Joe River Agricultural Use (Phillips Draw Area)

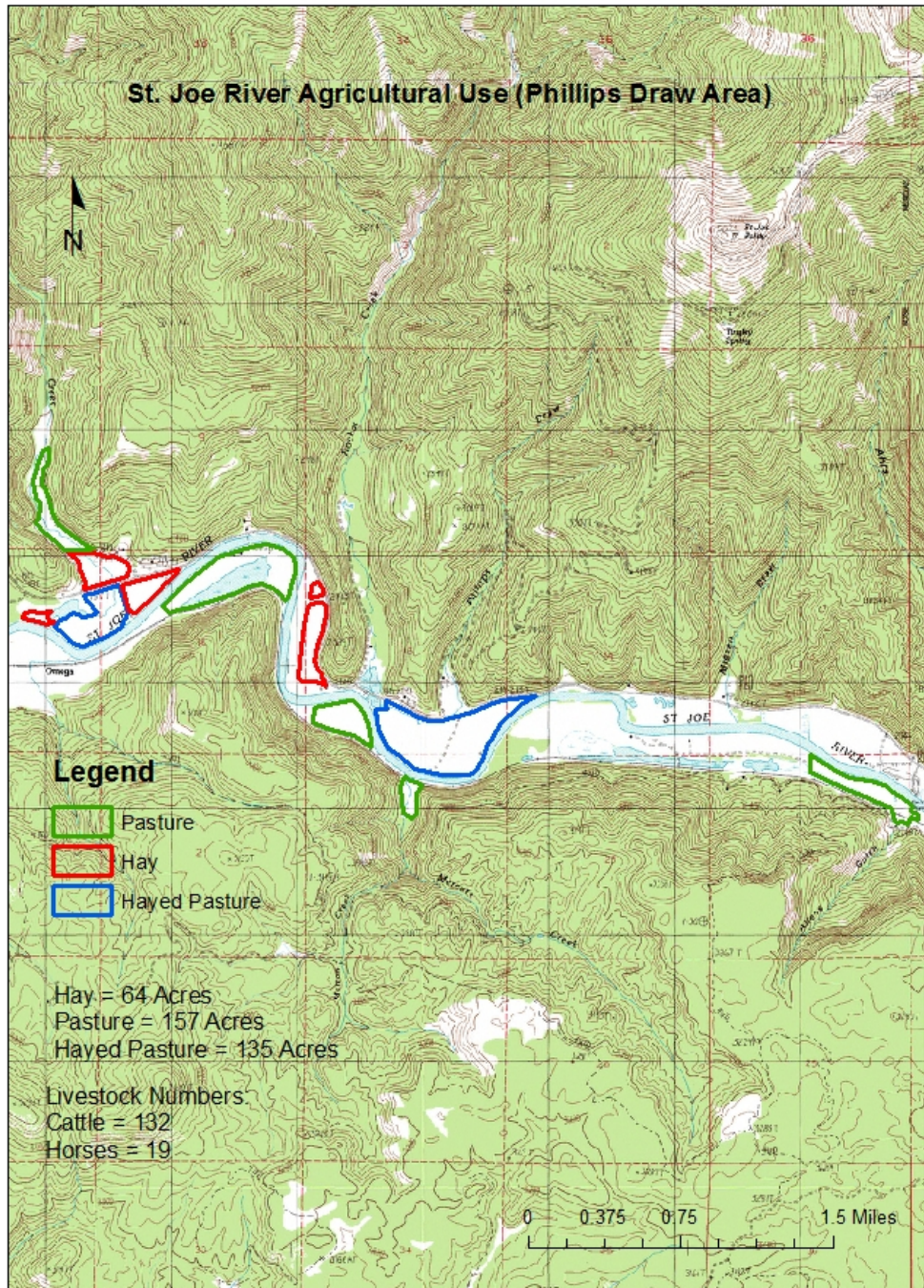


Figure 5: St. Joe River Agricultural Use (St. Joe City Area)

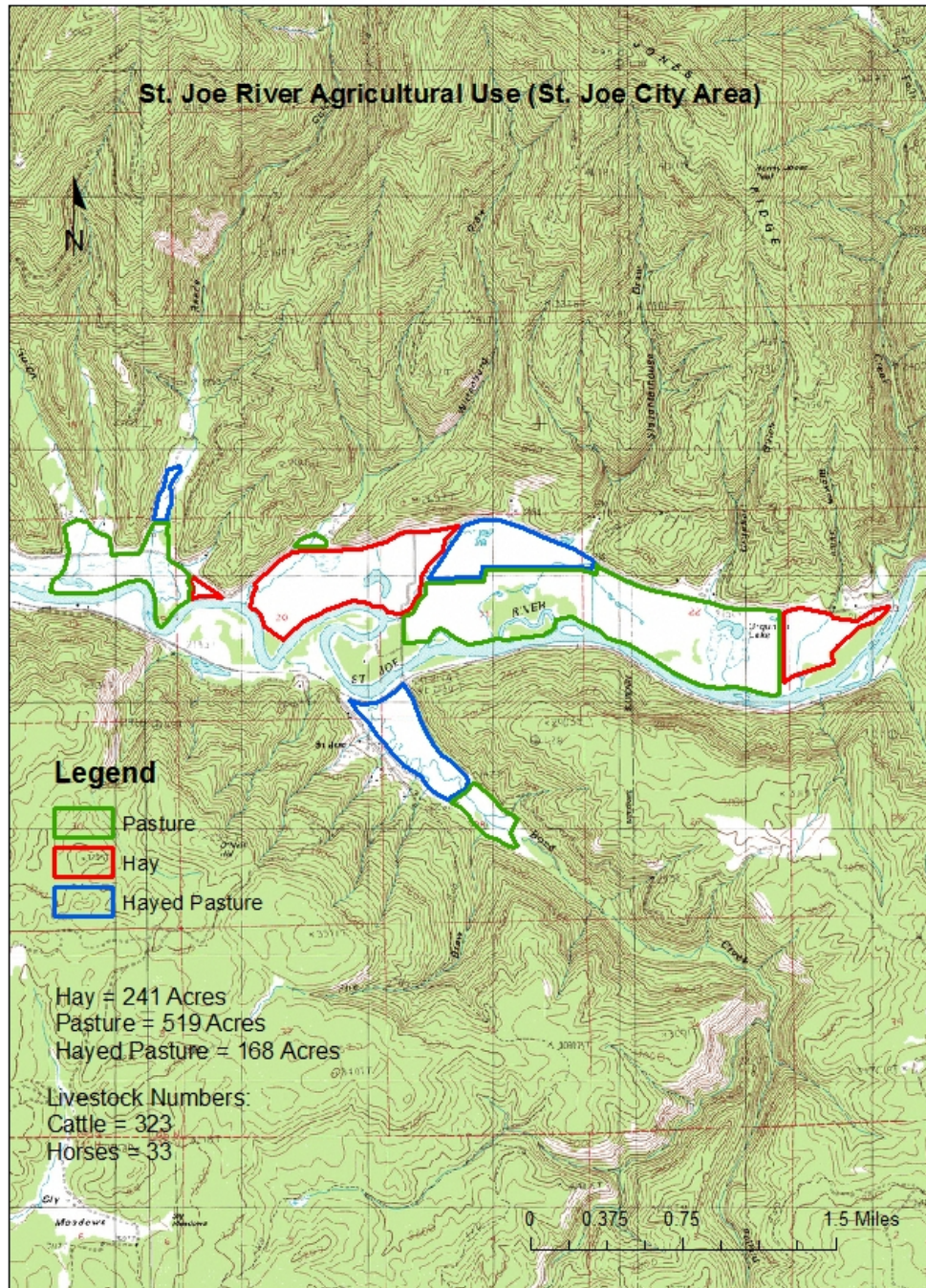


Figure 6: St. Joe River Agricultural Use (Calder Area)

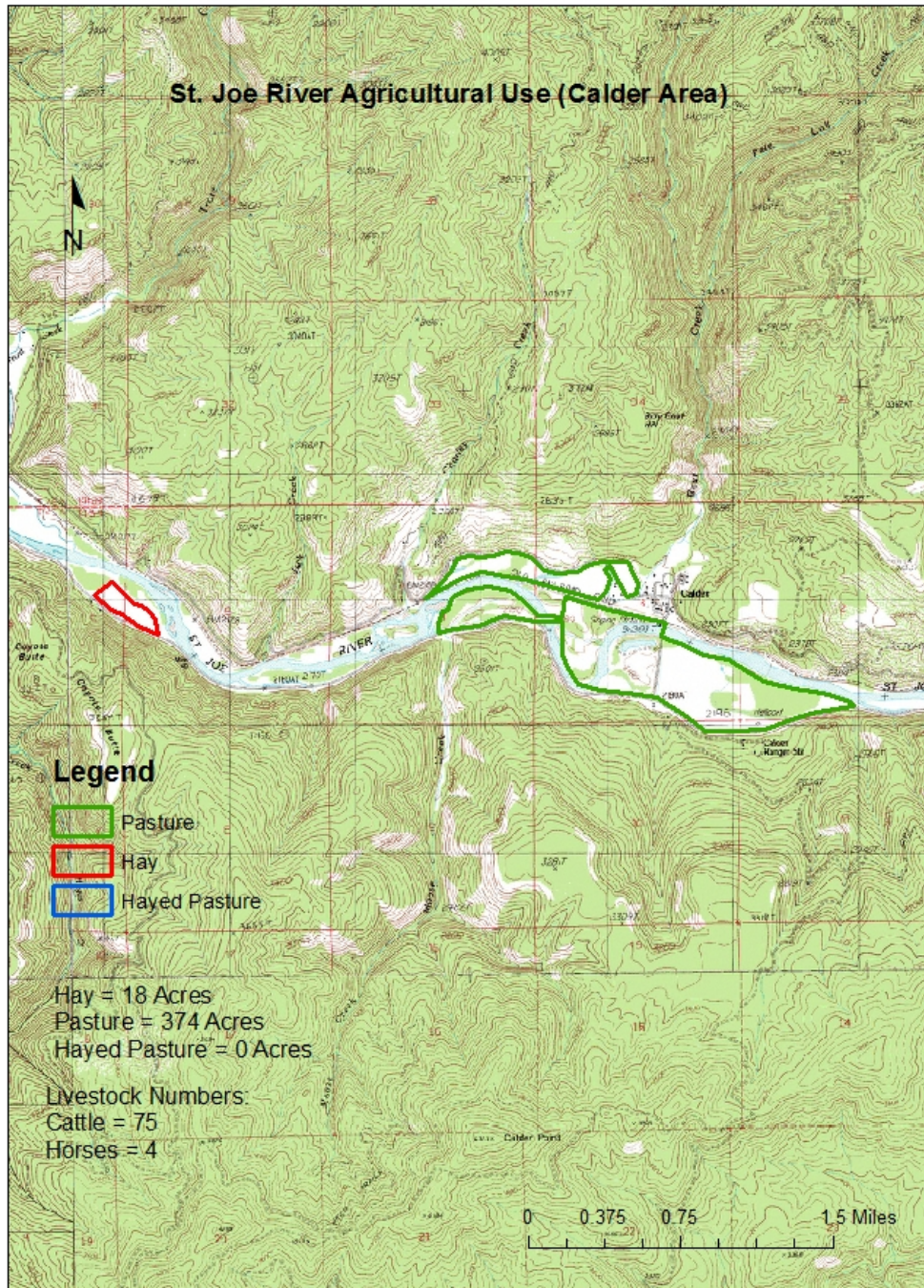


Figure 7: St. Joe River Agricultural Use (Herrick Area)

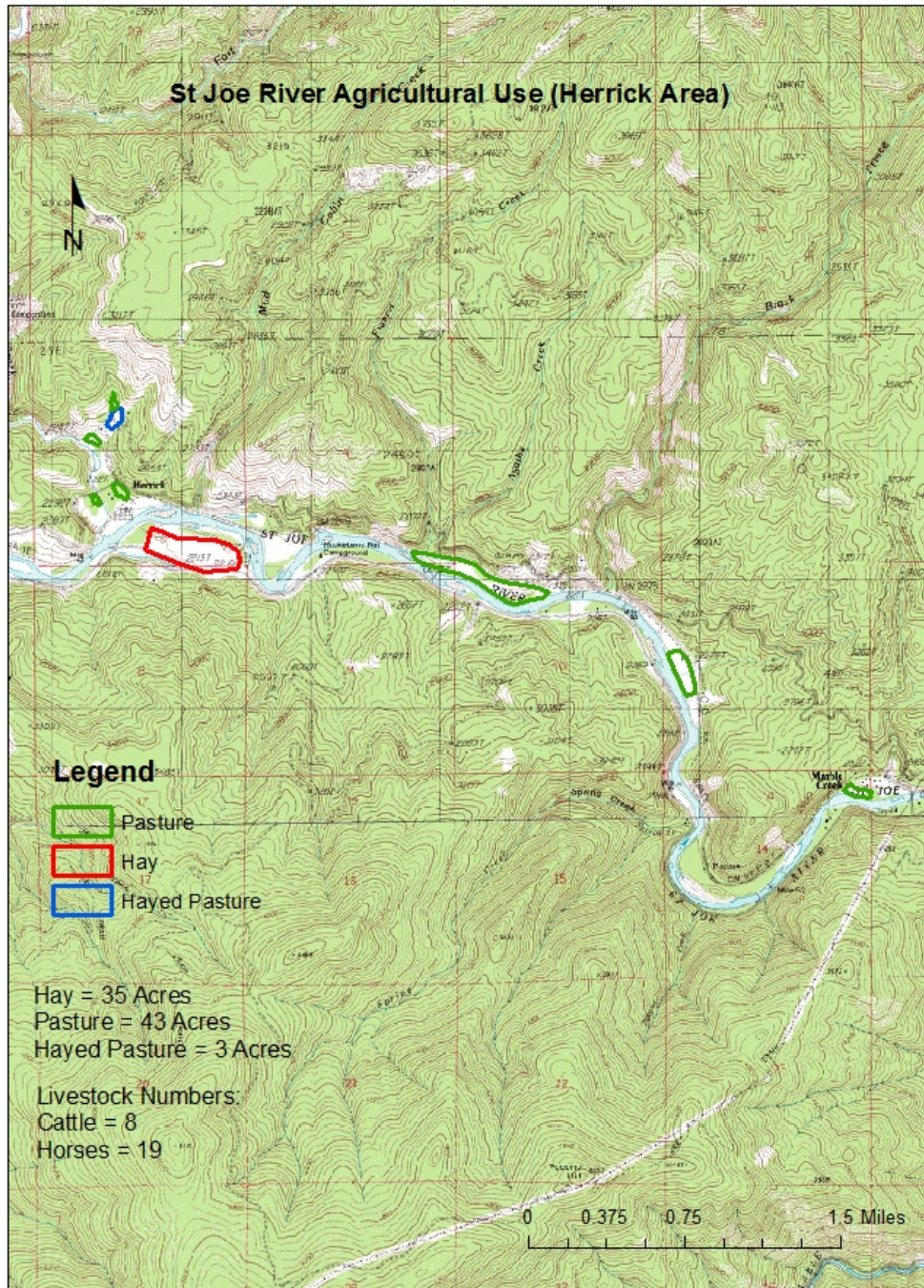
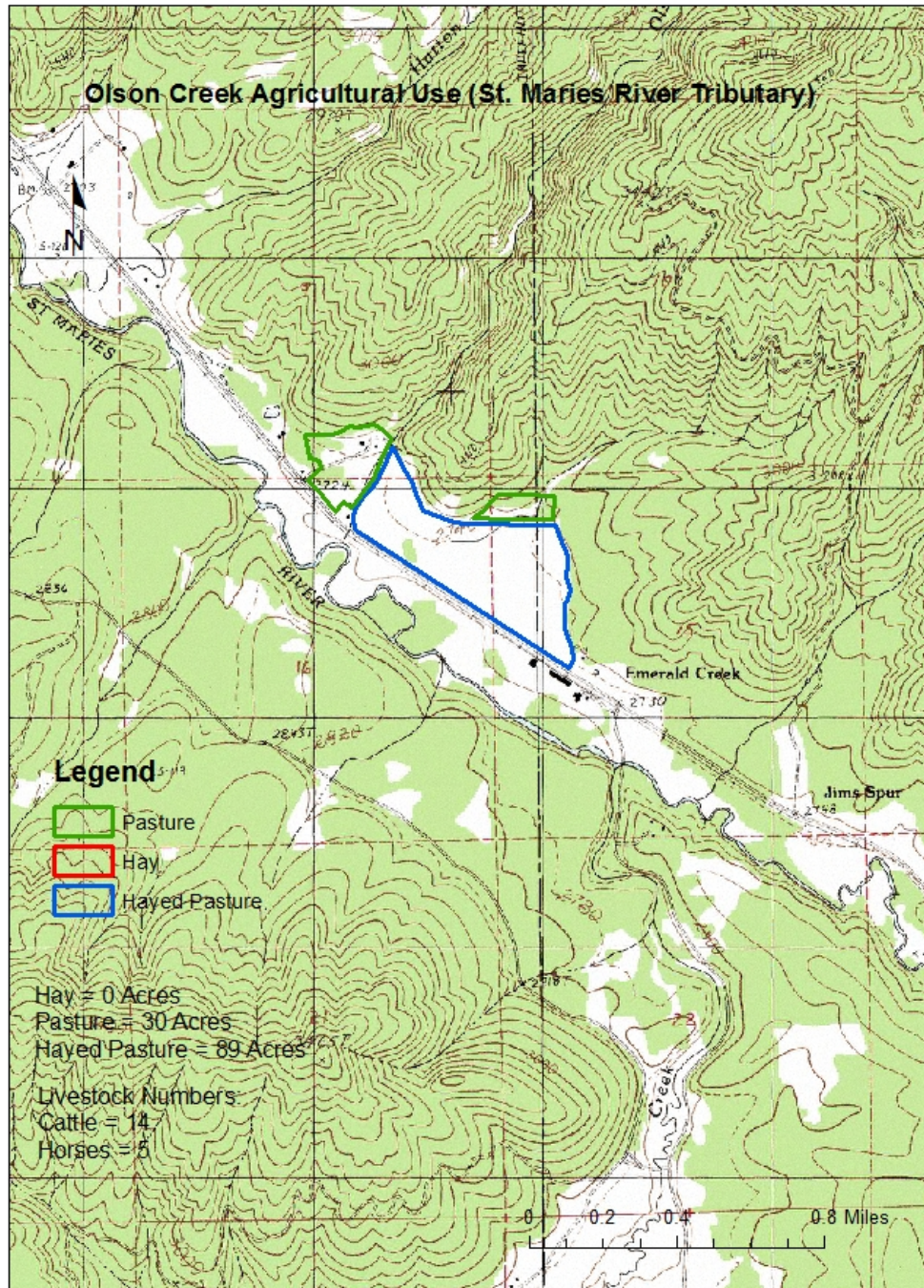


Figure 8: Olson Creek Agricultural Use (St. Maries River Tributary)



Critical Areas

Agricultural areas that have the potential to contribute excess pollutants to waterways are defined as critical areas for BMP implementation. Critical areas prioritized for this plan were identified during field observations from 2014- 2016.

Agricultural critical areas within the St. Joe River Sub-basin Temperature TMDL Addendum include:

- Pasture land where livestock have direct access to streams and riparian areas.
- Hay land adjacent to perennial stream corridors that lack adequate riparian buffering.

In summary, approximately 44,940 feet adjacent to the St. Joe River (including three winter feeding areas) and 1,200 feet adjacent to Olson Creek have been identified as agricultural critical areas for possible treatment.

Other non-TMDL agricultural impacts that were observed or discussed in the inventory and evaluation section have been included below for potential BMP implementation.

Estimated BMP Implementation Costs

The proposed treatment for agricultural pollutant reduction will be to implement BMPs through voluntary conservation plans. Table 2 lists the recommended agricultural BMPs and estimated costs, to help restore beneficial uses to the listed waterbodies in the St. Joe River Sub-basin Temperature TMDL Addendum.

Table 2. Estimated BMP's for the St. Joe River Sub-basin Temperature TMDL Addendum

Agricultural BMPs	Amount (Units)	Sub-Watershed	Estimated Costs
Riparian Fence	4,400 Feet	St. Joe River (St. Maries Area)	\$8,800
Riparian Forest Buffer	1,200 Feet or 0.7 Acre	St. Joe River (St. Maries Area)	\$1,540
Riparian Fence	8,300 Feet	St. Joe River (Phillips Draw Area)	\$16,600
Riparian Forest Buffer	4,900 Feet or 2.8 Acres	St. Joe River (Phillips Draw Area)	\$6,160
Streambank Protection(Rock/Veg)	7,000 Feet	St. Joe River (St. Joe City Area)	\$350,000
Riparian Fence	10,200 Feet	St. Joe River (St. Joe City Area)	\$20,400
Riparian Forest Buffer	13,300 Feet or 7.6 Acres	St. Joe River (St. Joe City Area)	\$16,720
Riparian Fence	10,500 Feet	St. Joe River (Calder Area)	\$21,000
Riparian Forest Buffer	5910 Feet or 3.4 Acres	St. Joe River (Calder Area)	\$7,480

Agricultural BMPs (Continued)	Amount (Units)	Sub-Watershed	Estimated Costs
Riparian Fence	300 Feet	St. Joe River (Herrick Area)	\$600
Riparian Forest Buffer	3,915 Feet or 2.2 Acres	St. Joe River (Herrick Area)	\$4,840
Riparian Fence	1,200 Feet	Olson Creek (St. Maries River Tributary)	\$2,400
		TOTAL COST	\$456,540
Non-TMDL Agricultural BMPs	Amount (Units)	Subwatershed	Estimated Costs
Riparian Fence	5,900 Feet	Street Creek	\$11,800
Riparian Fence	6,630 Feet	Reeds Gulch Creek	\$13,260
Riparian Fence	11,000 Feet	Bond Creek	\$22,000
Riparian Fence	3,580 Feet	Bear Creek	\$7,160
		TOTAL COST	\$54,220

The recommended voluntary treatment process for private agricultural landowners within the St. Joe River Sub-basin begins with contacting the local conservation district, the Benewah Soil and Water Conservation District. Contact information for the BSWCD is:

900 "E" Street
Plummer, Idaho 83851
Phone 208-686-1699, Ext.109
Leann.Daman@id.usda.gov
www.benewahswcd.org

The BSWCD works in partnership with the Natural Resources Conservation Service and the Idaho Soil and Water Conservation Commission, to provide free technical assistance to landowners wanting to improve their agricultural lands. The process begins with a thorough NRCS resources inventory of the farm or ranch (soil, water, air, plants, and animals), and ultimately the development of a good conservation plan (for more insight on planning, go to www.oneplan.org). Once the planning process is complete, the BSWCD can assist the landowner in seeking grants or cost-sharing type programs, to help pay for needed BMP installation. A list of funding opportunities for private landowners has been included in the Funding Section below.

Funding

Financial and technical assistance for installation of BMPs may be needed to ensure success of this implementation plan. The Benewah Soil and Water Conservation District can assist interested landowners in actively pursuing potential funding sources to implement water quality improvements on private agricultural and grazing lands. The conservation partnership can provide free technical assistance to help farmers and ranchers identify and solve natural

resource problems on their farms and ranches. This might come as advice and counsel through the design and implementation of a practice or treatment, or as part of an active conservation plan.

Many of the following programs can be used in combination with each other to implement BMPs. These sources include (but are not limited to):

CWA 319 –These are Environmental Protection Agency funds allocated to Tribal entities and the State of Idaho. The Idaho Department of Environmental Quality (DEQ) administers the Clean Water Act §319 Non-point Source Management Program for areas outside the Tribal Reservations. Funds focus on projects to improve water quality and are usually related to the TMDL process. Source: DEQ <http://www.deq.idaho.gov/>

Resource Conservation and Rangeland Development Program (RCRDP) –The RCRDP is a loan program administered by the ISWCC for implementation of agricultural and rangeland best management practices or loans to purchase equipment to increase conservation. Source: ISWCC <http://www.swc.idaho.gov/>

Conservation Reserve Program (CRP) –The CRP is a land retirement program for blocks of land or strips of land that protect the soil and water resources, such as buffers and grassed waterways. Source: NRCS <http://www.nrcs.usda.gov/>

Conservation Technical Assistance (CTA) –The CTA provides free technical assistance to help farmers and ranchers identify and solve natural resource problems on their farms and ranches. This might come as advice and counsel, through the design and implementation of a practice or treatment, or as part of an active conservation plan. Source: Bonner Soil and Water Conservation District and NRCS: <http://www.nrcs.usda.gov/>

Environmental Quality Incentives Program (EQIP): EQIP offers cost-share and incentive payments and technical help to assist eligible participants in installing or implementing structural and management practices on eligible agricultural land. Source: NRCS <http://www.nrcs.usda.gov/>

Conservation Security Program (CSP) –CSP is a voluntary program that rewards the Nation’s premier farm and ranch land conservationists who meet the highest standards of conservation environmental management. Source: NRCS <http://www.nrcs.usda.gov/>

Agricultural Conservation Easement Program (ACEP)- The Agricultural Conservation Easement Program provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits.. Under the Agricultural Land Easements component, NRCS helps Indian Tribes, state and local governments and non-governmental organizations protect working agricultural lands and limit non-agricultural uses of the land. Under the Wetlands Reserve Easements component, NRCS helps to restore, protect and enhance enrolled wetlands. NRCS <http://www.nrcs.usda.gov/>

Regional Conservation Partnership Program (RCPP)- The Regional Conservation Partnership Program promotes coordination between NRCS and its partners to deliver conservation assistance to producers and landowners. NRCS provides assistance to producers through partnership agreements and through program contracts or easement agreements. NRCS <http://www.nrcs.usda.gov/>

State Revolving Loan Funds (SRF) –These funds are administered through the ISWCC. Source: ISWCC <http://www.swc.idaho.gov/>

HIP – This is an Idaho Department of Fish and Game program to provide technical and financial assistance to private landowners and public land managers who want to enhance upland game bird and waterfowl habitat. Funds are available for cost sharing on habitat projects in partnership with private landowners, non-profit organizations, and state and federal agencies. Source: IDFG <http://fishandgame.idaho.gov/>

Partners for Fish and Wildlife Program in Idaho – This is a U.S. Fish and Wildlife program providing funds for the restoration of degraded riparian areas along streams, and shallow wetland restoration. Source: USFWS <http://www.fws.gov/>

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